

**Invitation for Comments on Prospective Candidates  
for the SAB's Contaminated Sediment Science Plan Review Panel.**

The EPA Science Advisory Board (SAB, Board) announced in 67 FR #146 49336-49337, July 30, 2002 that it had been asked to undertake a review of EPA's draft Contaminated Sediments Science Plan." The background, charge, and description of the review documents appear in the above referenced Federal Register notice and are also available at the SAB website ([www.epa.gov/sab](http://www.epa.gov/sab)). The Board invited nominations for the panel being formed. The SAB's process for panel formation -- approved by the Executive Committee May 8, 2002 -- has been designed for three purposes:

- a. to help the Board meet EPA's legal requirements;
- b. to be transparent to the public, so the public can understand and participate in the process; and
- c. to help the Board fulfill its mission.

Individuals and organizations provided nominees in response to the Federal Register notice; the Agency, SAB members and SAB staff provided additional names and nearly forty nominees were considered. This list has been narrowed down to a "Short List" of 23 candidates based on availability, expertise, interest, and the timely provision of information for the biosketches provided below. We invite comments from the public on these candidates. We welcome information, analysis or documentation that the Board should consider in evaluating the remaining candidates. This information will be carefully considered in selecting the panel.

The SAB Director, in consultation with SAB leadership, as appropriate, makes the final decision about who will serve on the panel. During Panel Selection, the SAB Staff completes its review of information regarding conflict of interest, possible appearance of impartiality, and appropriate balance and breadth needed to address the charge. The staff reviews all the information provided by the candidates, along with any Information that the public may provide in response to the posting of information about the prospective panel on the SAB website during the "Short List Phase," and information gathered by the SAB Staff independently on the background of each candidate.

Please provide any advice, observations or comments you think would be helpful in selecting the final candidates no later than September 30, 2002. Please send your comments to the attention of Lawrence Martin, Designated Federal Officer, Contaminated Sediments Science Plan Panel. Emailed comments are preferred ([martin.lawrence@epa.gov](mailto:martin.lawrence@epa.gov)). Written comments will also be accepted. Mr. Martin's mailing address is: U.S. EPA Science Advisory Board (1400A), 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

The dates for the meetings (face-to-face and teleconference) on this topic will be formally announced in the Federal Register. These meetings include two two-hour conference calls in October for organization, briefings, invited presentations, some public comment, and discussion by the panel. The panel will meet face-to-face on October 30-31, 2002 in or near Washington, DC, with conference calls to wrap up edits planned for November. The exact dates and times of the conference calls are still under discussion.

**Brief Bios of Candidates for the Contaminated Sediments Science Plan Panel (the "Short List")**

**Contaminated Sediments Science Plan**

**Adams, William**

**Rio Tinto**

William Adams received his Ph.D. in Aquatic Toxicology in 1976 from Michigan State University. His thesis was titled "Toxicity and Residue Dynamics of Selenium in Fish and Aquatic Invertebrates." He works at Rio Tinto as the senior science advisor on issues relating to product stewardship, sustainable development, ecological risk assessment, sediment assessment and regulatory affairs as related to metals, mining and the environment. From 1995 to 2002 he was employed at Kennecott Utah Copper as the Director of Environmental Affairs. His research interests included developing ecotoxicology risk assessment methods for metals, site-specific methodologies for water quality criteria for metals, evaluation of the sensitivity of threaten and endangered fishes, and development of an alternative strategy for metals to replace the existing PBT (persistent, toxicity and bioaccumulation) approach. From 1977 to 1991 he was employed by Monsanto in a number of science and research positions, including the application of biotreatment techniques to waste sites and the environmental fate and aquatic toxicity issues of dioxins. He first worked with the EPA Science Advisory Board in 1988 on a panel reviewing the proposed EPA methodology for deriving Sediment Quality Criteria. In 1991 he participated in EPA Science Advisory Board subcommittee review of the EPA Ecorisk Framework document and the EPA methodology for deriving dioxin Water Quality Criteria. In 1995 he was Co-organizer of Society of Toxicology and Chemistry Pelletton Workshop on sediment contaminant assessment. In 2000 he was workgroup chair of SETAC Technical Workshop on Porewater Assessment of sediments and in 2002, Co-chair of the 23rd Annual SETAC Program Committee. In 2002 he was appointed to the EPA Superfund National Advisory Committee for Environmental Policy and Technology (NACEPT), and chaired a review of the Review of the Mid-Continent Ecology Division, National Health and Environmental Effects Research Laboratory USEPA.

**Bartell, Steven**

**Cadmus Group, Inc.**

Dr. Steven Bartell, is an ecological modeler and ecorisk expert with the Cadmus Group, Inc. He has a broad range of technical skills and experience in the development, application, and evaluation of methods for quantitative ecological risk analysis and assessment. Dr. Bartell has published books, book chapters, and technical articles on ecological risk assessments, taught several courses on ecological risk assessment and worked with a variety of public and private sector clients on a diverse range of ecological risk assessments. In addition to his professional association with the SAB, which included participation on the EPEC metal in sediments panel, he has been engaged with the development and drafting of the methodology for assessing

ecological risks posed by chemical contaminants for the Commonwealth of Kentucky; evaluating the potential for introducing quantitative risk assessment methods in support of environmental legislation for Environment Canada; the review and evaluation of proposed ecological risk assessment approaches for the states of California and Florida, as well as for the country of Japan. He received his Ph.D. in Oceanography and Limnology from the University of Wisconsin. He is presently serving a special 1-year term to provide EPEC liaison to the Environmental Models Subcommittee of the Executive Committee.

### **Bay, Steve**

#### **Southern California Coastal Water Research Project**

Steve Bay is Director of the Toxicology Department at the Southern California Coastal Water Research Project where his primary research focus is the relationship between sediment contamination and biological effects. His current research includes projects to assess and improve the performance of sediment Toxicity Identification Evaluation (TIE) methods and to use TIE methods in TMDL development in southern California bays and estuaries. Mr. Bay works closely with California environmental management agencies to develop methods for sediment quality assessment. Current activities in this area include a five-year project to develop sediment quality objectives for the California Water Resources Control Board and a multi-year effort to assist the San Diego Regional Water Quality Control Board in developing guidelines for sediment quality assessment and cleanup in San Diego Bay. As Special Studies Manager for the Los Angeles Basin Contaminated Sediments Task Force, Mr. Bay is coordinating several multi-year research projects related to the disposal and effects of contaminated dredge material and is also assisting state and federal agencies in developing a long-term strategy for the management of contaminated sediments in southern California. His research has contributed to the development and review of marine toxicity test methods for California regulatory programs, and standardization of west coast effluent test methods for the U.S. EPA. He participated in the Pellston workshops on porewater toxicity method and the use of sediment quality guidelines. Mr. Bay helped found the Southern California Toxicity Assessment Group, a professional organization dedicated to improving the use of toxicity tests. Mr. Bay's experience and training includes invertebrate taxonomy, field biology, animal culture, physiology, and radioisotope techniques. He received his M.S. in Biology from California State University in 1982.

### **Bohlen, Frank**

#### **University of Connecticut**

W. FRANK BOHLEN is a professor with the Department of Marine Sciences at the University of Connecticut, Groton. His research has largely been applied coastal and stream processes studies examining factors such as sedimentary processes, sediment settling velocities, sediment transport systems, analysis of sediment transport systems and the relationship to PCB transfers, the effects of storms on sediment resuspension, time series observations of near-bottom suspended material concentrations, the impact of dredging on suspended material transport, and sediment capping of subaqueous dredged material disposal mounds. Dr. Bohlen was a

member of the NAS/NRC Committee on Contaminated Marine Sediments, 1993-1998 and the Committee on Assessment of Risks from Remediation of PCB-Contaminated Sediments, 1999-2001. Dr. Bohlen is a member of the American Geophysical Union, Estuarine Research Federation, The Oceanography Society, and Marine Technology Society. He received his Ph.D. in 1969 from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution.

### **Bridges, Tod**

#### **Corp of Engineers**

Todd S. Bridges is the Research Team Leader for Ecotoxicology and Environmental Risk at the U.S. Engineer Research and Development Center for the U.S. Army Engineer Research and Development Center. Recent publication titles include: Importance of uncertainty and variability to predicted risks from trophic transfer of PCBs in dredged sediments; A comparative screening-level ecological and human health risk assessment for dredged material management alternatives in New York/New Jersey Harbor; The use of spatial modeling in an aquatic food web to estimate exposure and risk; Toxicity of sediment-associated nitroaromatic and cyclonitramine compounds to aquatic invertebrates; Ecological risk assessment: uncertainty and variability from trophic transfer in management of contaminated dredged sediments; and Chronic toxicity of Great Lakes sediments to *Daphnia magna*: elutriate effects on survival, reproduction, and population growth. Dr. Bridges was invited to speak on Uncertainty in Sediment Risk Assessments at the USEPA/ACC Forum on Issues in Assessing and Managing Ecological Risks at Contaminated Sediment Sites, Chicago, IL; Uncertainty: its nature, analytical treatment and interpretation at the Society for Risk Analysis Symposium; Risk assessment applications in the U.S. dredging program for the National Research Council Symposium on Application of Risk Assessment in the Marine Transportation System. He was an Instructor for the USACE/USEPA Dredged Material Evaluation Seminar. Dr. Bridges received his Ph.D. in Biological Oceanography from North Carolina State University in 1992.

### **Chapman, Peter**

#### **EVS Environment Consultants**

Peter M. Chapman is a senior scientist at EVS environmental consultants. His professional areas of specialization are ecotoxicology/toxicity testing, environmental risk assessment, environmental quality management, training and technology transfer. Dr. Chapman has directed development and source evaluation studies of contaminants and toxic chemicals in water and sediment involving sewage treatment plants, mining, manufacturing, pulp and paper, wood processing, hazardous waste disposal, landfill operations, oil and gas, smelting and food processing. He has served as an advisor to the federal governments of both the United States and Canada for environmental toxicology and biomonitoring assessment policy and protocols; and directed projects (for government and industry) involving biological monitoring; assessment of toxicant levels (including Priority Pollutants) in tissues, sediments and water; ecological surveys; literature reviews for ranking environmental contaminants; and, bioassessment (e.g.,

toxicity testing). He has developed and verified a variety of bioassessment protocols for measuring/ predicting toxicity and bioaccumulation, including the use of benthic indicators for contaminant analysis and various toxicity tests. His research was key to the development of the Sediment Quality Triad approach to determining pollution-induced degradation in aquatic ecosystems. Dr. Chapman is the author of over 130 refereed journal and book publications and over 200 technical reports on subjects including: taxonomy, aquatic ecology, development of monitoring programs, risk assessment, and biological effects of chemicals. He is Senior Editor for the journal of Human and Ecological Risk Assessment, and Editor of the Learned Discourses in the SETAC Globe. He is a past member of the EPA SAB Sediment Criteria Subcommittee, and NRC Committee on the Bioavailability of Metals in Sediments. In 2001 the Society of Environmental Toxicology and Chemistry (SETAC) awarded him its Founders Award, SETAC's most prestigious award for an outstanding career and contributions to the environmental sciences. He received his Ph.D. in Benthic Ecology at the University of Victoria, BC, Canada in 1979.

**Chess, Caron**

**Rutgers University**

Caron Chess is an Associate Professor, Department of Human Ecology, Rutgers University and Director of the Center for Environmental Communication. She was previously the Founding Executive Director and later National Project Coordinator for the Delaware Valley Toxics Coalition (1981-1984). She has written extensively on topics of Risk Communication and Improving Public Participation in Solving Environmental Health Problems. She co-authored the publication Improving Dialogue: The Industry Risk Communication Manual, which was selected by the Society for Risk Analysis for the "Must Read" list for industry practitioners (1995). Dr. Chess was a member of the nominations committee for the Society for Risk Analysis (2001); member of the Communications Subcommittee of the Board of Scientific Counselors of the EPA, Office of Research and Development (2001); Invited participant, Workshop on Public Participation and Environmental Decision Making, National Research Council (2001); is a member of the Advisory Committee to Council of Society for Risk Analysis; was Panel Leader for Risk Communication at the World Health Organization International Seminar and Working Group Meeting on EMF, Risk Perception and Communication (1998); Chair for risk communication, Panel on Methyl Parathion, Agency for Toxic Substances and Disease Registry (1997); member, Committee on Risk Characterization, National Research Council (1994-1996); member, Governing Council, Society for Risk Analysis (1994-1996); member, EPA Science Advisory Board, Subcommittee on Valuation (1996-1997); and a member of the Editorial Boards of Human Ecology Review and Risk Analysis: An International Journal. Dr. Chess received her Ph.D. in Environmental Studies and Democratic Processes from State University of New York, College of Environmental Science and Forestry in 1997.

**DePinto, Joseph**

**Limno-Tech, Inc.**

Dr. DePinto is a senior scientist at Limno-Tech, Inc. He has been a part of the Great Lakes research community for 27 years involved with research on such topics as nutrient eutrophication; toxic chemical exposure and bioaccumulation analysis; contaminated sediment analysis and remediation; aquatic ecosystem structure and functioning; and watershed, tributary, and whole-lake modeling. Prior to employment with Limno-Tech he was a Full Professor in the Department of Civil, Structural and Environmental Engineering, and Director of the University-wide Great Lakes Program at the University at Buffalo. Recent relevant projects include development and application of an integrated exposure model for PCBs in Green Bay, Lake Michigan; investigation of nutrient cycling/food web interactions in Lake Ontario through the development of a model that couples nutrient-phytoplankton relationships with a complex food web bioenergetics model; leading a team of scientists and engineers at the University at Buffalo in the development of a Geographically-based Watershed Analysis and Modeling System (GEO-WAMS), a Modeling Support System that coupled a Geographic Information System (ARC/INFO) with existing and newly developed watershed and water quality models; application of sediment and contaminant mass balance models to evaluate remediation of contaminated sediments in a number of river systems, including the Buffalo River, St. Clair River, Hudson River, Lower Fox River, and Kalamazoo River; and development of methods for spatial and temporal interpolation of atmospheric data collected as part of the EPA-Lake Michigan Mass Balance Study. He participated in the SETAC Pellston Conference on "Criteria for Persistence and Long-Range Transport of Chemicals in the Environment," in 1998; was a Peer Reviewer for EPA, ERL-Duluth, on the Dioxin Aquatic Risk Assessment Report, (July 1993 - October, 1993), past president, and serves on the Board of Directors of the International Association for Great Lakes Research, and is Associate Editor, Jour. of Great Lakes Research, January, 1984-present. He received his PhD in Environmental Engineering in 1975 from the University of Notre Dame.

#### **Di Giulio, Richard**

#### **Duke University**

Richard Thomas Di Giulio is a Professor with the Nicholas School of the Environment & Earth Sciences at Duke University and Director of the University's Superfund Basic Research Center. Dr. Di Giulio's research is focused upon biochemical and cellular responses of aquatic animals to environmental stressors, particularly contaminants. His laboratory is concerned with both basic studies of mechanisms of contaminant metabolism, adaptation and toxicity, and with the development of sensitive, mechanistically-based indices of exposure and toxicity that can be used in biomonitoring of free-living organisms. The long-term goal of this research is to bridge the gap between fundamental toxicological research and the development of mechanism-based approaches for monitoring environmental health. He seeks to utilize the comparative biology paradigm to elucidate linkages between human and ecosystem health. He has consulted extensively, including as a contractor in the development of the Monte Carlo uncertainty analysis for the surface water component for land disposal restrictions determinations for the EPA, and as a science advisor for ecological risk assessments of Superfund sites. Dr. Di Giulio served on the Board of Directors for the Society of environmental Toxicology and Chemistry (SETAC), and Chaired the Membership Committee. He was also a member of the SETAC 19th Annual Meeting

Program Committee and Chair of the Plenary Session. He is also a member of the editorial boards of Toxicological Sciences, Human and Ecological Risk Assessment, and Chemosphere. He received his Ph.D., from Virginia Polytechnic Institute and State University in 1982.

### **DiToro, Dominic**

#### **Manhattan College**

Dominic DiToro, Ph.D., Donald J. O'Connor Endowed Chair of Environmental Engineering at Manhattan College. Dr. Di Toro has specialized in the development and application of mathematical and statistical analyses to stream, lake, estuarine and coastal water quality and sediment problems. His research has led to the development of interactive sediment-water column water quality models. Recently his work has focused on the development of sediment quality criteria for the EPA and the development of sediment flux models for nutrients and metals. For the past ten years Dr. Di Toro has been contributing technical guidance to the EPA's sediment quality criteria development efforts. Some of his most notable recent accomplishments include the development of sediment quality criteria (equilibrium partitioning, AVS and SEM for metals, and narcosis theory for PAHs) for USEPA and the development of sediment flux models for nutrients, oxygen, and metals. He is the author or co-author of more than sixty articles in the peer reviewed literature, and has a book, "Sediment Flux Modeling," accepted for publication by John Wiley & Sons. He received the 1997 Society of Toxicology and Environmental Chemistry (SETAC) Founders Award, the society's highest award, for his contributions to the field of environmental science in general and his contributions to water quality modeling in particular. Dr. Di Toro received his Ph.D. in Civil Engineering from Princeton University in 1967.

### **Endicott, Doug**

#### **Great Lakes Environmental Center**

Douglas Endicott, P.E. is the senior environmental engineer at the Great Lakes Environmental Center. He is responsible for developing and conducting applied environmental engineering studies and projects, with emphasis on water quality, bioaccumulation, and aquatic ecosystem modeling. Through his experience with the USEPA and GLEC, Mr. Endicott is familiar with the development and application of mathematical models for many water quality applications involving transport, fate, and bioaccumulation processes of contaminants. He also conducts engineering studies for a wide range of environmental applications, including regulatory and cost-benefit analysis, technical guidance for standards development and implementation, total maximum daily load (TMDL) and mixing zone studies. Mr. Endicott has led modeling studies for the Great Lakes. He has been responsible for study design, project management and application of mathematical models (hydrodynamic and sediment transport; eutrophication; chemical partitioning, transformation, and fate; and food web bioaccumulation) for the Great Lakes and their associated tributaries and embayments. He conducted model calibration, verification, and uncertainty analysis procedures; point and non-point source, tributary and atmospheric load estimation; and field and laboratory data analysis and reduction procedures. Mr. Endicott managed model development for Lake Michigan Mass Balance Project. Mr. Endicott received his

MSE in Environmental Engineering from the University of Michigan in 1984.

**Field,M. Jay**

**U.S. Department of Commerce**

L. Jay Field Team Leader for Technical Support for Coastal Protection and Restoration Division, Office of Response and Restoration, National Oceanic and Atmospheric Administration (NOAA). Duties include providing technical support to NOAA Coastal Resource Coordinators and U.S. Environmental Protection Agency (EPA) in the evaluation of ecological risk to freshwater and coastal marine resources resulting from releases of contaminants at hazardous waste sites. Recent work has included conducting and evaluating aquatic ecological risk assessments at Superfund sites and the evaluating and developing sediment guidelines. He served on the technical advisory committees for EPA for the Remedial Investigation of the Hudson River PCBs Superfund site, the National Sediment Inventory methodology evaluation, and the Great Lakes National Program Office guidance manual to support the assessment of contaminated sediments in the Great Lakes. Recent publication titles include: Predicting amphipod toxicity from sediment chemistry using logistic regression models; Application of a sum\_PAH model and logistic regression model to sediment toxicity data based on a species-specific water-only LC50 toxic unit for *Hyalella azteca*; Predictions of sediment toxicity using consensus-based freshwater sediment quality guidelines; Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls; and Development of a framework for evaluating numerical sediment quality targets and sediment contamination in the St. Louis River Area of Concern. Mr. Field received his M.S. in Fisheries Biology from the University of Washington School of Fisheries in 1984.

**Gilmour,Cynthia**

**The Academy of Natural Sciences**

Dr. Cindy Gilmour, is Curator of the Academy of Natural Sciences, Estuarine Research Center in St. Leonard, MD. Academy of Natural Sciences in Maryland, Dr. Gilmour has expertise in Mercury biogeochemistry: mechanisms and control of microbial mercury methylation from the cellular to ecosystem level; Sulfate-reducing bacteria and sulfur biogeochemistry in aquatic sediments; Estuarine and lacustrine microbial ecology; and response to stressors. Dr. Gilmour is extensively published, active in numerous professional associations including the American Association for the Advancement of Science, American Chemical Society (Geochemistry and Environmental Chemistry Divisions), American Society for Microbiology (Microbial Ecology), and American Society of Limnology and Oceanography. In addition to the SAB, Dr. Gilmour has been an active participant in numerous advisory capacities including NSF Environmental Geochemistry and Biogeochemistry Review Panel, the States of Florida and Maryland, and the USGS. She received her Ph.D. from the University of Maryland in Marine, Estuarine and Environmental Sciences.

**Lanza,Guy**

## **University of Massachusetts**

Guy R. Lanza is a Professor of Microbiology and Director of the Environmental Sciences Program at the University of Massachusetts at Amherst, and Director of the Graduate Program in Environmental Toxicology and Risk Assessment. Dr. Guy R. Lanza has been involved in research, teaching, curriculum development, and consulting in several areas of the environmental sciences including ecotoxicology, environmental impact assessment, applied and environmental microbiology, aquatic ecology, and water quality for more than 30 years. He has completed studies to develop and implement novel methods for measuring and monitoring ecotoxicological effects in soil, water, and sediments, including sediment microbial enzyme activity tests for detecting toxicant impacts. He has also directed several research projects on bioremediation and phytoremediation strategies suitable for hazardous waste sites. Dr. Lanza has also done research on the ecology of infectious diseases and is currently involved in environmental impact assessments of several major hydroelectric dam projects in Asia and Africa. Dr. Lanza is Editor-in-Chief of the International Journal of Phytoremediation (CRC Press) and serves on the Editorial Board of the Journal of Environmental Toxicology and Water Quality (John Wiley and Sons). Dr. Lanza has a Ph.D. in Biology/ Environmental Microbiology from Virginia Polytechnic Institute and State University.

## **Maddalena,Randy**

## **Lawrence Berkeley National Laboratory**

Randy Louis Maddalena works in the Indoor Environment Department of the Environmental Energy Technologies Division at Lawrence Berkeley National Laboratory. His research has included investigations of Influential Parameter Classification in Probabilistic Multimedia Models, Soil Contamination and Human Exposure: A Comprehensive Assessment of Exposure Analysis Methodology, Comparison of Multi-Media Transport and Transformation Models: Regional Fugacity Model vs. CalTOX; Developing and Evaluating Distributions in Probabilistic Human Exposure Assessments; Representing Uncertainty in Risk Assessment: Ranking Uncertain Parameters. Dr. Maddalena was a participant in the 1999 National Exposure Research Laboratory, National Human Exposure Assessment (NHEXAS) Analysis Workshop, and the Second Workshop on Practical Issues in the Use of Probabilistic Risk Assessment at Sarasota in 1999. He is Co-chair of the Society of Environmental Toxicology and Chemistry Advisory Group on Fate and Exposure Modeling. Dr. Maddalena received his Ph.D. from the University of California, Davis, in Agricultural and Environmental Chemistry in 1998.

## **Maney,John P.**

## **Environmental Measurements Assessment**

Dr. John P. Maney received his Ph.D. in Analytical Chemistry from the University of Rhode Island, Kingston, Rhode Island. Dr. Maney has over 30 years experience in analytical chemistry and over 20 years experience in environmental sampling, environmental analysis and data quality issues. He has directed and founded environmental testing laboratories, managed

numerous government contracts and subcontracts, which have addressed among other issues, analytical method development, analytical method validation, hazardous waste sampling, and authoring of guidance. Dr. Maney has chaired and participated in the consensus standard process for USEPA/ASTM accelerated standards regarding sampling, subsampling and data quality. For the last 11 years he has been president of Environmental Measurements Assessment (EMA), a consulting company that focuses on sampling, analytical and quality issues.

#### **McFarland, Michael J.**

##### **Utah State University**

Dr. Michael J. McFarland received his bachelors' degree in Engineering and Applied Science from Yale University, his masters' degree in Chemical Engineering from Cornell University and his Ph.D. in Agricultural Engineering from Cornell University. Dr. McFarland is currently an associate professor in the Department of Civil and Environmental Engineering at Utah State University where his research interests are focused in the areas of air quality management, industrial waste management and pollution prevention. Dr. McFarland has served on numerous federal, state and local environmental engineering and public health advisory committees for the US Dept. of Defense, US Environmental Protection Agency, US Dept. of Energy, National Science Foundation, Utah Dept. of Environmental Quality and Cache County, Utah. Dr. McFarland has authored or coauthored over fifty publications in the field of environmental engineering including engineering textbooks, workbooks, journal articles and conference proceedings. Dr. McFarland is a registered professional engineer in the State of Utah and currently holds Grade IV operator certifications for both wastewater and water treatment. Dr. McFarland is a member of the American Academy of Environmental Engineers (AAEE), the Water Environment Federation (WEF), the Society for Risk Analysis, National Biosolids Partnership and the Association of Environmental Engineering and Science Professors (AEESP).

#### **Pfaender, Fredrick**

##### **University of North Carolina at Chapel Hill**

Frederick K. Pfaender is a Professor of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill, with a Joint appointment as Director of Ecology for the Carolina Federation of Environmental Programs. Dr. Pfaender's research is concerned with microbially mediated transformations of xenobiotic chemicals in soil, marine and subsurface environments. The primary focus is on identification of the environmental factors that regulate microbial activities. Other interests include microbial ecology, nutrient exchanges in rivers and estuaries, estuarine pollution; biodegradation of petroleum hydrocarbons by peritrophic aquifer microbial communities; and biodegradation of detergent chemicals in estuarine and near-shore marine environments. Dr. Pfaender has published on his research in the areas of adaptation of aquifer microbial communities to the biodegradation of xenobiotic compounds: influence of substrate concentration and preexposure; a comparison of microbial community characteristics among petroleum-contaminated and uncontaminated subsurface soil samples; the effect of inorganic and organic supplements on the microbial degradation of phenanthrene and pyrene in soils; and

polynuclear aromatic hydrocarbon metabolism in soils: relationship to soil characteristics and preexposure. Dr. Pfaender received his PhD in Microbiology from Cornell University in 1971.

### **Reible,Danny**

#### **Louisiana State University**

Danny David Reible holds the Chevron Endowed Professor of Chemical Engineering at Louisiana State University and a joint appointment as Director of the Hazardous Substance Research Center/South and Southwest. He has received awards from the American Chemical Society and American Institute of Chemical Engineers. Professor Reible's research activities have been focussed on the movement and fate of chemicals in the natural environment and have resulted in more than 80 publications and reports in a broad range of environmental topics including contaminant adsorption and desorption from sediments and the movement and dissolution of petroleum and solvents in soils. His recent efforts have included the preparation of review articles on atmospheric dispersion, contaminant release from sediments, contaminant and remediation processes in soils, and chemodynamics. He also lectures widely, and is a sought after consultant for industry. He participated in the Pellston Workshop on Use of Sediment Quality Guideline in 2002, was Director of the Pan-American Advanced Study Institute on In-Situ Assessment and Remediation of Contaminated Sites in 2002; was invited to testify before the US House of Representatives Subcommittee on Water Resources and the Environment on Management of Contaminated Sediment in 2001; was Director of the NATO Advanced Study Institute on In-Situ Assessment and Rededication of Contaminated Sediments in 2000; is/was a participant at the National Research Council - Environmental Rededication at Navy Facilities Committee(ongoing), and Rededication of PCB-Contaminated Sediments Committee (1999 - 2001); and is Associate Editor for Chemical Engineering Journal, Elsevier Science Publishers. Dr. Reible received his Ph.D. in Chemical Engineering in 1982 from the California Institute of Technology.

### **Splitstone,Douglas**

#### **Spiltstone and Associates**

Douglas E. Splitstone is Principal of Splitstone & Associates. He has designed data collection programs to investigate potential environmental impacts in air, water, and soil. Mr. Splitstone has conducted statistical analyses of data related to the extent of site contamination and remedial planning, industrial wastewater discharges, and the dispersion of airborne contaminants. Mr. Splitstone has also developed statistical decision criteria for evaluating when acceptable environmental cleanup levels have been achieved. He has successfully employed geostatistical analysis and estimation techniques for mapping the areal extent and total volume of dioxin contaminated soils at the site of a former New Jersey pesticide plant. He has also successfully employed these techniques to map the extent of contamination in the sediments of the Passaic River and design the sampling plan for the collection of data to assess the extent of possible contamination by radioactive material in the environs of Department of Energy's (DOE's) Feed Materials Production Center near Fernald, Ohio. He has served as a member of the

Task Group on Epidemiology and Statistical Methodology for the USEPA's Center for Environmental Epidemiology at the University of Pittsburgh's Graduate School of Public Health; and previously consulted with Science Advisory Board's Air Toxics Monitoring Subcommittee, and panels on Quality Management and Secondary Data Use. Mr. Splitstone is a member of the American Statistical Association (ASA) and is a founder and past chairman of that organization's Committee on Statistics and the Environment. He was awarded the Distinguished Achievement Medal by the ASA's Section on Statistics and the Environment in 1993. He was chairman for the Sixth Symposium on Statistics and the Environment that was held at the National Academy of Sciences. Mr. Splitstone received his M.S. in Mathematical Statistics from Iowa State University in 1967.

### **Stahl,Ralph**

### **Dupont**

Ralph G. Stahl, Jr., Ph.D., D.A.B.T. is Senior Consulting Associate for ecological risk assessment and natural resource damage assessments for the DuPont Company Corporate Remediation Group. Dr. Stahl's research interests include biological oceanography, public health microbiology, and taxonomy of marine and estuarine organisms; and is skilled in laboratory bench analysis including water quality analysis for NPDES permits; organic trace analysis by GC; metabolite analysis by HPLC; mammalian and vertebrate tissue/cell culture; cell fusions, cloning, cell-cycle analysis; mammalian and vertebrate cytogenetic analysis; human and mammalian chromosome banding; In vitro mutagenesis assays; flow cytometry; and In vitro toxicology. He has also experience with risk assessment; toxicity identification evaluations; cash-flow analysis and financial metrics; benchmarking, ecological risk assessment, type a and b natural resource injury determinations, and habitat equivalency analysis. Publications include topics on natural remediation of environmental contaminants and its role in ecological risk assessment and risk management; using reproductive and developmental effects data in ecological risk assessments for oviparous vertebrates exposed to contaminants; and contaminant fate and effects in freshwater wetlands. Dr. Stahl is a Diplomat of the American Board of Toxicology, Society of Environmental Toxicology and Chemistry (SETAC), where he also serves as Chairman of the Environmental Technical Implementation Panel for Long Range Research Initiative, and a member of the Ecological Risk Assessment Sub-Team. He is widely published and consults extensively with USEPA on ecological risk assessment, including an ORD Peer review of Management Objectives for Ecological Risk Assessment; and a Colloquium on Setting Ecological Risk Management Objectives. He was a participant in the National Academy of Science / National Research Council (NRC) Committee on Environmental Remediation at Navy Facilities (2000 – 2002), and the OECD Workshop on the use of Monitoring Data in the Environmental Assessment of Industrial Chemicals. Berlin, Germany, May 13-15, 1998. He was a steering committee member for the Pellston Workshop on Multiple Stressors in Ecological Risk Assessment. Dr. Stahl received his Ph.D. in Toxicology and Environmental Science from the University of Texas Health Science Center, Houston, Texas.

### **Theis,Thomas**

### **University of Illinois at Chicago**

Dr. Theis is the founding director of the Institute for Environmental Science and Policy at the University of Illinois at Chicago. Formerly, Theis was the Bayard D. Clarkson Distinguished Professor and Director of the Center for Environmental Management at Clarkson University. Professor Theis' areas of expertise include the mathematical modeling and systems analysis of environmental processes, the environmental chemistry of trace organic and inorganic substances, interfacial reactions, subsurface contaminant transport, and hazardous waste management. He has been principal or co-principal investigator on over forty funded research projects totaling in excess of six million dollars, and has authored or co-authored over eighty papers in peer review research journals, books, and reports. He is a member of the USEPA Science Advisory Board (Environmental Engineering Committee), is past editor of the Journal of Environmental Engineering, and serves on the editorial boards of The Journal of Contaminant Transport, and Issues in Environmental Science and Technology. He has served on numerous professional committees including the Scientific Committee on Problems in the Environment (SCOPE), and the World Bank funded team of scholars for advising the Universidad Nacional Del Litoral (Argentina) on environmental engineering education. From 1980-1985 he was the co-director of the Industrial Waste Elimination Research Center (a collaboration of Illinois Institute of Technology and University of Notre Dame), one of the first Centers of Excellence established by the USEPA, and was Principal Investigator on the NSF-Sponsored Environmental Manufacturing Management Program at Clarkson.

### **Windom, Herbert L.**

### **Skidaway Institute of Oceanography**

Herbert L. Windom is Professor/Emeritus at the Skidaway Institute of Oceanography. Research Interests include: Riverine, estuarine and continental shelf and slope geochemical processes; land-sea transport; trace metal biogeochemistry, marine, estuarine and coastal environmental quality; and estuarine and coastal marine pollution. Recent Publications include: Sediment manganese and biogenic silica as geochemical indicators in estuarine salt marshes of coastal Georgia; and General Guidelines for using the Sediment Quality Triad. He served on the Science Advisory Board Subcommittee of Sediment Quality Criteria; was a consultant to the UNEP GEMS/WATER GEF Proposal Development (Rapid Assessment of Freshwater Resources in International River Basins as a Framework for the Promotion of Environmentally Sound River Basin Management; a member of the Group of Experts on Methods, Standards, and Intercalibration (GEMSI) of the Intergovernmental Oceanographic Commission (IOC) of UNESCO; and a member of NSF Advisory Panel on Biogeochemistry and Environmental Chemistry (1995); and Chairman, GEMS/Water Expert Consultation on the Assessment of Land-Based Sources of Pollution (1995). Dr. Windom received his Ph.D. in Marine Geochemistry from the University of California, San Diego, in 1968.

